



PhotoMark® Reflections™

PV Backsheet Films

What's better than a durable backsheet with no PET or Fluoropolymers? How about a durable backsheet with no interlayer adhesives? That's right – Tomark-Worthen has created a revolutionary new backsheet based on a proprietary polyamide alloy that is weatherable, dimensionally stable and cost effective - and it does not contain any Fluoropolymer or PET layers and does not use any adhesives! Our backsheet is not susceptible to hydrolysis or UV degradation.



Tomark-Worthen has capitalized on its two decade history in PV backsheet innovation to create this breakthrough product. Based on known materials that have excellent track records in outdoor applications that also provide excellent electrical qualities, PhotoMark® Reflections™ will certainly help make you panel more reliable and competitive.

Characteristics	1000V
Thickness, $\mu\text{m} \pm 10\%$	255
Weight, g/m^2	270
EVA Peel Strength, N/cm	> 40

Typical Properties	1000V
Partial Discharge, VDC IEC 60664-1	> 1,000
Shrinkage after 30 min at 150C (MD/TD)	0.20% / 0.20%
Tensile Strength, MPa (MD/TD)	27.4 / 24.8
Modulus, MPa	327 / 261
Elongation, %	595 / 563
Dielectric, KV_{DC}	33.8
Comparative Testing Index, V	600
RTI, $^{\circ}\text{C}$	>140 $^{\circ}\text{C}^*$
MVTR, $\text{g}/\text{m}^2/\text{day}$	2.2
Volume Resistivity, Ω/mm^3	4.1×10^{12}
Reflectivity, %	91%
Colors (front/back)	white/white black/black custom colors available upon request
Roll Sizes	Width: 50cm to 140cm Length: 150m to 600m